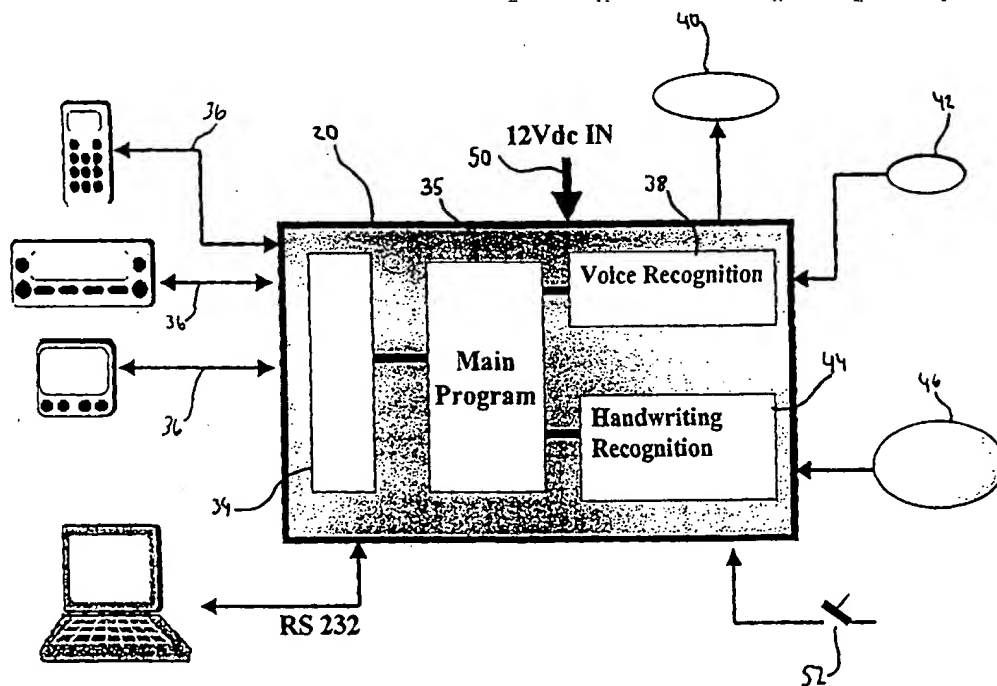


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<p>(21) International Application Number: PCT/IL99/00238</p> <p>(22) International Filing Date: 6 May 1999 (06.05.99)</p> <p>(30) Priority Data: 60/084,520 7 May 1998 (07.05.98) US</p> <p>(71) Applicant (for all designated States except US): ART ADVANCED RECOGNITION TECHNOLOGIES INC. [US/US]; 3375 Cochran Street, Simi Valley, CA 93063-2528 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): ILAN, Gabriel [IL/IL]; Eliyahu Hakim Street 12, 69120 Tel Aviv (IL). GILOH, Benjamin [IL/IL]; Moshav Yaad, 20155 D.N. Misgav (IL). KADOSH, Arie [IL/IL]; Remez Street 39/1, 22426 Naharia (IL).</p> <p>(74) Agent: EITAN, PEARL, LATZER & COHEN-ZEDEK; 2 Gav Yam Center, Shenkar Street 7, 46725 Herzlia (IL).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p>

(54) Title: HANDWRITTEN AND VOICE CONTROL OF VEHICLE COMPONENTS



(57) Abstract

A recognition system (20) for use in a vehicle or the like includes a handwriting recognizer (44) and a voice recognizer (38) for receiving handwriting and voice signals, where the signals are associated with commands used to operate with a variety of vehicle appliances. Such appliances may include, but are not limited to, car alarms (32), electric windows, personal computers (28), navigation systems (26), and audio (30) and telecommunications equipment (24).

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a handwriting recognition unit to output at least one second command from said at least one command data set; and

a control unit to receive said at least one first command and at least one second command and to communicate a command signal associated therewith to at least one appliance within a vehicle.

1/ ont.
26. (Previously added). An apparatus according to claim 25 further comprising a microphone operatively connected to said voice recognition unit.

27. (Previously added). An apparatus according to claim 25 further comprising a touchpad operatively connected to said handwriting recognition unit.

28. (Currently amended). The apparatus of claim 25 wherein said control unit comprises a unit is to compare said at least one first command and said at least one second command.

29. (Currently amended). The apparatus of claim 25 wherein said control unit comprises a unit is to combine said at least one first command and said at least one second command.

30. (Previously added). The apparatus of claim 25 wherein said at least one command data set is associated by a user with at least one 3 dimensional hand gesture.

31. (Previously added). The apparatus of claim 25 wherein said at least one appliance is a sunroof.

32. (Previously added). The apparatus of claim 25 wherein said at least one appliance is a window.

33. (Previously added). A method comprising:

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16. (Previously amended). The apparatus of claim 25 wherein said at least one command data set is associated by a user with at least one hand signal.
17. (Previously amended). The apparatus of claim 25 wherein said at least one command data set is associated with handwritten and voice signals modifiable by said user.
18. (Previously amended). The apparatus of claim 25 wherein said at least one appliance is a car alarm.
19. (Previously amended). The apparatus of claim 25 wherein said apparatus connects to said at least one appliance by an interface appropriate to said at least one appliance.
20. (Cancelled)
21. (Previously amended). The apparatus of claim 25 wherein said at least one appliance is a cellular telephone and said at least one command data set includes short text messages.
22. (Previously amended). The apparatus of claim 25 wherein said at least one appliance is a personal computer and said at least one command data set includes short text messages.
23. (Previously amended). The apparatus of claim 25 wherein said at least one appliance is a radio.
24. (Previously amended). The apparatus of claim 25 wherein said at least one appliance is a navigation system and said at least one command data set includes locations.
25. (Previously amended). An apparatus comprising:
a voice recognition unit to output at least one first command from at least one command data set;